

U.S. Patent Application Serial No. 10/539,303  
Reply to Office Action dated January 16, 2007

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Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) An electro-mechanical screw actuator assembly, of the type comprising:

an electric motor (30) with a stator (31) and a rotor (34),

a screw mechanism (60), including a rotatable nut (61) and a central screw (62) translatable along a given axis (x),

a planetary gear reduction system (50), disposed between the rotor (34) and the screw mechanism (60), for driving this the screw mechanism, the gear reduction system including a plurality of satellite gears:

wherein the rotor (34) carries including a radial flange having a plurality of axially protruding pins rotatably supporting the satellite gears (52) of the reduction system (50), wherein the rotor has outer peripheral toothing made of metallic material and formed by a peripheral edge of the radial flange.

- 2-5. (Cancelled)

6. (Currently Amended) The actuator assembly of claim 3, wherein it comprises further comprising position sensor means (38) operatively associated with the metallic toothing (37) in order to provide signals indicative of the angular position of the rotor (34).

7. (Currently Amended) The actuator assembly of claim 6, wherein the sensor means (38) are carried by an annular supporting bracket (39) mounted on one side of the stator (31).

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8. (Cancelled)

9. (Currently Amended) The actuator assembly of claim 2, wherein it further comprises at least a further comprising locking means (16) controlled for being selectively movable between a position engaged with the toothing (37) for locking rotation of the rotor (34) and a position disengaged from the toothing (37) for allowing rotation of the rotor.

10. (Currently Amended) The actuator assembly of claim 1, wherein each of the satellite gears (52) has two toothed portions (53, 54):

- a first toothed portion (53) meshing with a fixed gear (55) and
- a second toothed portion (54) meshing with a gear (56) fast fixed for rotation with the nut (61).

11. (Currently Amended) The actuator assembly of claim 1, coupled with a brake calliper (A) for operating a braking force on a motor vehicle.

12. (New) The actuator assembly of claim 1, wherein the radial flange of the rotor directly supports the satellite gears.